

CURRICULUM VITAE

Mélanie Roy, 27/10/1981, born in Kuujuaq, Canada

Current situation and contact

Maître de conférence – HDR (habilitée à diriger les recherches), at University Paul Sabatier – Toulouse France.

Associated-professor at Université du Québec en Abitibi-Témiscamingue (UQAT).

Instituto Franco-Argentino para el Estudio del Clima y sus Impactos (UMI IFAECI/CNRS-CONICET-UBA-IRD). Dpto. de Ciencias de la Atmosfera y los Océanos, FCEN, Universidad de Buenos Aires. Intendente Guiraldes 2160 - Ciudad Universitaria. Pabellon II - 2do. Piso (C1428EGA) Ciudad Autónoma de Buenos Aires – Argentina

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University degrees

- 1999** Baccalauréat, mention Très Bien
- 1999-2001** Classe préparatoire BCPST, Lycée Montaigne, Bordeaux.
- 2001-2005** Master of cellular and molecular biology – École Normale Supérieure Lyon (8e/32), **élève fonctionnaire**
- 2004** One year preparation to teaching at ENS Lyon **Agrégation de SV-STU** (66^e).
- 2004-2005** Master 2 Ressources phylogénétiques et interactions biologiques -University Montpellier 2, mention Très Bien (1^{ère}/11).
- 2005-2009** PhD in ecology and evolution of mycoheterotrophy by orchids, Centre d'Écologie Fonctionnelle et Évolutive, Montpellier, supervised by M.-A. Selosse. **First price of the French Botanical Society for the PhD (2009).**

Professional experiences

- 2008/2009** ATER (teaching) at University Montpellier 2
- 2009/2010** Post-doctoral project on functional diversity of ectomycorrhizal fungi in Europe (6 months, INRA Cestas Pierroton).
- 2010/....** Maître de conférence (Assistant professor) at EDB, UPS
- 2014** Delegated by the CNRS in UMR EcoFoG for 6 months (Kourou, Guyane).
- 2017-2019** Associated professor at UQAT, Canada (only expert, no contract)
- 2021** Delegated by the CNRS in UMI IFAECI (Buenos Aires, 1 year)

National and International visibility

Projects

In 10 years, I have been involved in 21 projects, national and international (funded by Switzerland and Canada). I was the leader of 5 and contributed to 6 ANR, and 3 central projects of the LabEx CEBA.

Latest/Ongoing projects

- **IEA RACINE** : International Emerging Action to develop collaborations in Argentina. Resilience in Action: Changing Interaction Networks at Ecotones (CNRS, 13000[€], PI)
- **MULTIMYCO** : LabEx CEBA grant to work on Multiscale determinants of arbuscular mycorrhizal fungal communities (CNRS, 14800[€], co-PI)
- **ACTUAAL** : Accompagner les Transitions de l'Urbain Anthropocène en Amérique latine (CNRS, 25,000[€])
- **ABC Saül** : Atlas de la Biodiversité Communale de Saül (AFB, PI for task on fungi)
- **BENDYS** : The last European old-growth ("subnatural") fir-BEech forests: a long-term and global study for their better understanding, conservation and management (ANR JCJC to Vanessa Py, 358000[€])

- **BLOBIFORM** : Block neutral models to predict the response of Biodiversity in tree-related microhabitats to Forest Management (ANR JCJC to Fabien Larroche, 153130^E)
- **GLOBNET** : Global biogeography of interaction network (ANR to Wilfried Thuiller)

Edition

Editor for *Mycorrhiza*, *Frontiers in Microbiology*, *Forests*
 Reviewing since 2010 of 72 papers, for 23 journals.

Evaluations

- Evaluation for the Research council of the University of Leuven (2)
- Evaluation for the Natural and Engineering Research Council of Canada
- Evaluation for the French ANR, and IRD

Councils

- Pedagogical council of the LabEx TULIP since 2016.
- Scientific council of the French Phytopathology and Mycological Society since 2016.

International invitations

- Short invited stay at Ceske Budejovice University (2 months, Tcheck Republic, 2010 and 2012), IMPA in Manaus (1 month, Brazil, 2014), Santa Catarina University (2 weeks, Brazil, 2016), Viçosa University (1 month, Brazil, 2017), Leiden University (2 weeks, Naturalis institute, Pays-Bas, 2018), Mendoza CONICET (1 month, 2019), Rouyn Noranda University (UQAT, 2 weeks, Canada, 2019)
- Invited lectures at Orsay University (2013), Louvain Catholic University (Belgium, 2014), Bialystock University (Poland, 2016), Institute of Applied Science (Toulouse, 2017), Montréal Botanical Garden (IRBV, Canada, 2019).
- Invited conference for congresses at Aussois (Journées Jean Chevaugéon, France, 2016), Lausanne (Colloque d'Anthropologie, 2017), Leiden (Symposium au Naturalis institute, 2018).
- Invitation to the COP25 (Chili, 2019) from the CNRS

Scientific expertise

- Mycological inventories and fieldwork organization for the Parc Amazonien de Guyane, Réserve de la Trinité et des Nouragues, *planète revisitée* project.
- Mycological expertise for the Office National des Forêts (Project Passiflor-2)
- Botanical inventories for the CPIE (Tarn), Gaillac town, museum of natural history of Gaillac and Toulouse.
- Expert for IUCN (Orchids of French Guiana)
- Expert for the Mycological collection of MNHN
- Wine-tasting events around climate change in France and Argentina (Institut Français d'Argentine, ViviFrancia, Alliance Française).
- Expert for television programs for Arte (*enquêtes archéologiques*), *échappées belles*, *des racines et des ailes*.

Scientific animation

Discussion groups

- Co-responsible of external lab conferences at EDB (2012-2014).
- Leader of a submitted International Emerging Action project between France and Argentina for the CNRS
- Member of the Research and Teaching reflexion group at EDB (2019)
- Organization of discussion around the COP25 at EDB (2019)
- Co-organization of a workshop on well-being indicators and their interactions with biodiversity in Gaillac (2019)

Congress organization

- Mycology and Phytopathology congress (Journée Jean Cheveugéon), 25-29/01/2016, Aussois, France. co-responsible of a symposium

- Association for Tropical Biology and Conservation, 20-24/06/2016, Montpellier, France. co-responsible of a symposium
- Brazilian Mycological Congress, 05-09/09/2016, Florianopolis, Brazil. Co-responsible of a symposium
- Mycology and Phytopathology congress (Journée Jean Cheveaugeon), 22-26/01/2018, Aussois, France. Co-responsible of the congress
- International Mycology Congress, 16-21/07/2018, Panama. Co-responsible of a symposium

Visiting scientists

- Grant to welcome Jason Hoeksema (Oxford University, USA), from LabEx TULIP in 2015
- Grant to welcome Diego Vazquez (IADIZA, Argentina), from LabEx TULIP in 2019

Teaching activities

Since 2010, I teach at University Paul Sabatier, but also in Albi University center. My teachings are closely related to my research on symbioses and have opened my research to biogeography and community ecology. I am responsible at UPS of a master 1 option on tropical ecology and co-responsible of botany teachings in Albi.

Teaching description

Site	Topic (* responsibility)	Type	Level
UPS	Biodiversité végétale	CM	L1
	Systématique végétale	TP	L3
	Mycologie	TP, TD, Terrain	L3
	Inventaires botaniques	Terrain	L3
	Macro-écologie et biogéographie	CM, TD	M1
	Ecologie évolutive	CM, TD	M1
	Phylogénie et méthodes comparatives	CM, TD	M1
	Biodiversité et dynamique des écosystèmes tropicaux*	CM, TD, TP, Terrain	M1
	Ecologie et Viticulture (Cultures perennes)	CM, TD, Terrain	L3 pro
	Interactions biotiques	CM, TD	M2 (BEE)
Centre Universitaire JFC, Albi	Biologie végétale*	CM, TD, TP	L1
IUT (UPS), Auch	Biodiversité végétale*	Terrain	L3
	Ecologie et viticulture	CM, TD, Terrain	L3 pro

International courses

- 2014** Supervision of Erasmus mundus student in French Guiana (field and analyses, 1 week)
- 2014** In the Amazon, along the Rio Negro, I gave a one-month field trip on white sands, to students from Peru, Brazil, and USA (Supported by Trebediv project, IRD) with colleagues from INPA (Manaus) and Santa Catarina University (Florianopolis).
- 2015** Labex TULIP summer School, 13-17/07/2015, in the Pyrénées. Courses on ecological and mycorrhizal networks to international graduate and PhD students.
- 2016** During the Brazilian Mycology Congress in Florianopolis, I gave a three days course for students of Santa Catarina University. We collected ectomycorrhizae, observed them and discussed with international experts.
- 2019** In Buenos Aires, I have already given two courses (one day each), from the field to the lab, to observe and discuss the ecology of ectomycorrhizae, at Faculty of agronomy and Faculty of sciences of Buenos Aires University.

Educational and administrative responsibilities

Educational responsibilities

- Co-responsible of master 2 Economics and Ecology
- Responsible of lectures in master 1 (Biodiversité et Dynamique des écosystèmes tropicaux, 6 ECTS), master 2 (interactions biotiques et modélisation, 3 ECTS ; Introduction to Problem based learning in economics and ecology, 5 ECTS).

- Co-responsible of two lectures at the centre universitaire d'Albi (Biologie végétale, L1, 6 ECTS and biodiversité végétale, L3, 3 ECTS).

Evaluations

- Evaluation for master 1 and 2 for masters at UPS : *Biologie Végétale, Ecologie, Ecologie et Anthropisation, Ecologie et Evolution*.
- PhD committee : Félix Lallemand (MNHN, 2015-18) and Irène Calderon-Sanou (LECA, 2018-2021)
- PhD evaluation : Tristan Cordier (BIOGECO, 2014), Anne Houlès (LSTM, 2017), Sofia Gomes (Naturalis institute, 2018)
- HDR evaluation : Abdalah Diedhiou (Université de Montpellier, 2017)

Commissions at UPS

- Co-responsible of the commission for DCCE (teaching service for PhD) recruitment for the Biogeosciences department (UPS) since 2018.
- Commission for PRAG recruitment (Centre Universitaire d'Albi)
- Member of the Scientific Council BEST for the Biology and Geoscience Department

Supervising experience

I currently co-supervise two PhD students :

- **Alexandre Raimbault** (2020-...), co-supervised with Antoine Brin. Funded by Région Occitanie (50%) and Ecole d'ingénieurs de Purpan (50%). Topic : resilience of ancient forests in South-West France : influence of soil below-ground networks
- **Evick Mestre** (2020-...), co-supervised with Yves Bergeron and Rock Ouimet (UQAM). Funded by UQAM. Topic : Migration of Maple trees in Canada : potential factors and facilitation.

I have also co-supervised on PhD :

- **Mélessande Nagati** (2015-2019), co-tutelle co-supervised with Yves Bergeron, Monique Gardes and Annie Desrochers. Funded by UQAT. Topic : Facilitation of balsam fir by mycorrhizae in boreal forest.

I have a long experience in supervising licence and master students (6 undergraduate/L3 student ; 16 Master 1 ; 8 Master 2), and regularly welcome students for short stay in my lab (Mariana Sa from Brazil, Alexis Carteron from Canada).

Bibliography

Peer-reviewed journals

1. **Roy M**, Dubois M-P, Proffit M, Vincenot L, Desmarais E, Selosse M-A. 2008. Evidence from population genetics that the ectomycorrhizal basidiomycete *Laccaria amethystina* is an actual multihost symbiont. *Molecular Ecology* 17: 2825–2838.
2. Pedersen HA, Watthana S, **Roy M**, Suddee S, Selosse M-A. 2009. *Cephalanthera exigua* rediscovered: new insights in the taxonomy, habitat requirements and breeding system of a rare mycoheterotrophic orchid. *Nordic Journal of Botany* 27: 460–468.
3. **Roy M**, Watthana S, Stier A, Richard F, Vessabutr S, Selosse M-A. 2009. Two mycoheterotrophic orchids from Thailand tropical dipterocarpacean forests associate with a broad diversity of ectomycorrhizal fungi. *BMC Biology* 7: 51.
4. **Roy M**, Yagame T, Yamato M, Iwase K, Heinz C, Faccio A, Bonfante P, Selosse M-A. 2009. Ectomycorrhizal *Inocybe* species associate with the mycoheterotrophic orchid *Epipogium aphyllum* but not its asexual propagules. *Annals of Botany* 104: 595–610.

5. Selosse M-A, **Roy M.** 2009. Green plants that feed on fungi: facts and questions about mixotrophy. *Trends in Plant Science* 14: 64–70.
6. Selosse, M. -A., Martos F., Perry B., Maj P., **Roy M.**, et Pailler, T. 2010. Saprotrophic fungal symbionts in tropical achlorophyllous orchids: Finding treasures among the 'molecular scraps'? *Plant Signaling & Behavior* 5 (4): 349-53.
7. Tranchida-Lombardo, V., **M. Roy**, E. Bugot, G. Santoro, Ü Püttsepp, M. Selosse, et S. Cozzolino. 2010. Spatial repartition and genetic relationship of green and albino individuals in mixed populations of *Cephalanthera* orchids. *Plant Biology* 12 (4): 659-67.
8. Richard, F., **M. Roy**, O. Shahin, C. Sthultz, M. Duchemin, R. Joffre, et M. -A. Selosse. 2011. Ectomycorrhizal communities in a Mediterranean forest ecosystem dominated by *Quercus ilex*: seasonal dynamics and response to drought in the surface organic horizon. *Annals of Forest Science* 68 (1): 57-68.
9. Kohout, P., T. Těšitelová, **M. Roy**, M. Vohník, et J. Jersáková. 2013. A diverse fungal community associated with *Pseudorchis albida* (Orchidaceae) roots. *Fungal Ecology* 6 (1): 50-64.
10. **Roy M.**, C. Gonneau, A. Rocheteau, D. Berveiller, J.-C. Thomas, C. Damesin, et M.-A. Selosse. 2013. Why do mixotrophic plants stay green? A comparison between green and achlorophyllous orchid individuals in situ. *Ecological Monographs* 83 (1): 95-117.
11. **Roy M.**, J. Rochet, S. Manzi, P. Jargeat, H. Gryta, P. -A. Moreau, et M. Gardes. 2013. What determines *Alnus*-associated ectomycorrhizal community diversity and specificity? A comparison of host and habitat effects at a regional scale. *New Phytologist* 198 (4): 1228-38.
12. Těšitelová, T., J. Jersáková, **M. Roy**, B. Kubátová, J. Těšitel, T. Urfus, P. Trávníček, et J. Suda. 2013. Ploidy-specific symbiotic interactions: divergence of mycorrhizal fungi between cytotypes of the *Gymnadenia conopsea* group (Orchidaceae). *New Phytologist* 199 (4): 1022-33.
13. Gonneau, C., J. Jersáková, E. de Tredern, I. Till-Bottraud, K. Saarinen, M. Sauve, **M. Roy**, T. Hájek, et M. -A. Selosse. 2014. Photosynthesis in perennial mixotrophic *Epipactis* spp.(Orchidaceae) contributes more to shoot and fruit biomass than to hypogeous survival. *Journal of Ecology* 102 (5): 1183-94.
14. Henkel, T. W., A. W. Wilson, M. C. Aime, J. Dierks, J. K. Uehling, **M. Roy**, H. Schimann, F. Wartchow, et G. M. Mueller. 2014. Cantharellaceae of Guyana II: New species of *Craterellus*, new South American distribution records for *Cantharellus guyanensis* and *Craterellus excelsus*, and a key to the Neotropical taxa. *Mycologia* 106 (2): 307-24.
15. Gladieux, P., A. Feurtey, M. E. Hood, A. Snirc, J. Clavel, C. Dutech, **M. Roy**, et T. Giraud. 2015. The population biology of fungal invasions. *Molecular Ecology* 24 (9): 1969-86.
16. Buyck, B., P. -A. Moreau, R. Courtecuisse, A. Kong, **M. Roy**, et V. Hofstetter. 2016. *Cantharellus coccolobae* sp. nov. and *Cantharellus garnieri*, two tropical members of *Cantharellus* subg. *Cinnabarinus*. *Cryptogamie, Mycologie* 37(3): 391-404.
17. **Roy M.**, H. Schimann, R. Braga-Neto, R. AE Da Silva, J. Duque, D. Frame, F. Wartchow, et M. A. Neves. 2016. Diversity and distribution of ectomycorrhizal fungi from Amazonian lowland white-sand forests in Brazil and French Guiana. *Biotropica* 48 (1): 90-100.
18. Shefferson, Ri. P., **M. Roy**, Ü. Püttsepp, et M. -A.Selosse. 2016. Demographic shifts related to mycoheterotrophy and their fitness impacts in two *Cephalanthera* species. *Ecology* 97 (6): 1452-62.
19. Barbosa-Silva, A., C. L. Ovrebo, B. Ortiz-Santana, M. CA Sá, M. A. Sulzbacher, **M. Roy**, et F. Wartchow. 2017. *Tylopilus aquarius*, comb. et stat. nov., and its new variety from Brazil. *Sydowia*. 69: 115-122.

20. Delgat, L. & **Roy M.** *Lactifluus ceraceus* in Crous, Pedro W., Michael J. Wingfield, T. I. Burgess, A. J. Carnegie, GE St J. Hardy, D. Smith, Brett A. Summerell, J. F. Cano-Lira, J. Guarro, et J. Houbraken. 2017. Fungal Planet description sheets: 625–715. *Persoonia: Molecular Phylogeny and Evolution of Fungi* 39: 270.
21. De Crop, E., J. Nuytinck, K. Van de Putte, K. Wisitrassameewong, J. Hackel, D. Stubbe, K. D. Hyde, **M. Roy**, R. E. Halling, et P.-A. Moreau. 2017. A multi-gene phylogeny of *Lactifluus* (Basidiomycota, Russulales) translated into a new infrageneric classification of the genus. *Persoonia: Molecular Phylogeny and Evolution of Fungi* 38: 58.
22. Gryta, H., C. Van de Paer, S. Manzi, H. Holota, **M. Roy**, et G. Besnard. 2017. Genome skimming and plastid microsatellite profiling of alder trees (*Alnus* spp., Betulaceae): phylogenetic and phylogeographical prospects. *Tree Genetics & Genomes* 13 (6): 118.
23. **Roy, M.**, A. C. Pozzi, R. Gareil, M. Nagati, S. Manzi, I. Nouioui, N. Sharikadze, P. Jargeat, H. Gryta, et P. -A. Moreau. 2017. Alder and the Golden Fleece: high diversity of Frankia and ectomycorrhizal fungi revealed from *Alnus glutinosa* subsp. *barbata* roots close to a Tertiary and glacial refugium. *PeerJ* 5: e3479.
24. **Roy, M.**, A. Vasco-Palacios, J. Geml, B. Buyck, L. Delgat, A. Giachini, T. Grebenc, E. Harrower, F. Kuhar, et A. Magnago. 2017. The (re) discovery of ectomycorrhizal symbioses in Neotropical ecosystems sketched in Florianópolis. *New Phytologist* 214 (3): 920-23.
25. Schwob, G., **M. Roy**, S. Manzi, T. Pommier, et M. P. Fernandez. 2017. Green alder (*Alnus viridis*) encroachment shapes microbial communities in subalpine soils and impacts its bacterial or fungal symbionts differently. *Environmental Microbiology* 19 (8): 3235-50.
26. Gruhn, G., S. Dumez, P. -A. Moreau, **M. Roy**, Or. Morreale, H. Schimann, et R. Courtecuisse. 2018. The genus *Resinicium* in French Guiana and the West Indies: a Morphological and Molecular Survey, Revealing *Resinicium grandisporum* sp. nov. *Cryptogamie, Mycologie*. 38(4) : 469-484.
27. Hoeksema, J. D., **M. Roy**, G. Łaska, A. Sienkiewicz, A. Horning, M. J. Abbott, C. Tran, et J. Mattox. 2018. *Pulsatilla patens* (Ranunculaceae), a perennial herb, is ectomycorrhizal in northeastern Poland and likely shares ectomycorrhizal fungi with *Pinus sylvestris*. *Acta Societatis Botanicorum Poloniae*. 2018. 87(1):3572.
28. Lagarde, A., P. Jargeat, M. Roy, M. Girardot, C. Imbert, M. Millot, et L. Mambu. 2018. Fungal communities associated with *Evernia prunastri*, *Ramalina fastigiata* and *Pleurosticta acetabulum*: Three epiphytic lichens potentially active against *Candida* biofilms. *Microbiological Research* 211: 1-12.
29. Nagati, M., **M. Roy**, S. Manzi, F. Richard, A. Desrochers, M. Gardes, et Y. Bergeron. 2018. Impact of local forest composition on soil fungal communities in a mixed boreal forest. *Plant and Soil*, 432(1-2): 345-357.
30. Pozzi, A. C., **M. Roy**, M. Nagati, G. Schwob, S. Manzi, M. Gardes, P. -A. Moreau, et M. P. Fernandez. 2018. Patterns of diversity, endemism and specialization in the root symbiont communities of alder species on the island of Corsica. *New Phytologist* 219(1): 336-349.
31. Schwob, G., **M. Roy**, C. A. Pozzi, A. Herrera-Belaroussi, et M. P. Fernandez. 2018. In planta sporulation of Frankia as a determinant of alder-symbionts interactions. *Applied and Environmental Microbiology*. 01737-18.
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34. Gruhn, G., P. Alvarado, N. Hallenberg, **M. Roy**, et R. Courtecuisse. 2018. Contribution to the taxonomy of *Sistotremastrum* (Trechisporales, Basidiomycota) and the description of two new species, *S. fibrillosum* and *S. aculeocrepatans*. *Phytotaxa* 379 (1): 27-38.
35. Accioly T., Sousa J.O., Moreau PA, Lecuru C., Silva B D.B, **Roy M.**, Gardes M., Baseia I.G., Martin M.P. 2019. Hidden fungal diversity from the Neotropics: *Geastrum hirsute*, *G. schweinitzii* (Basidiomycota, Geastrales) and their allies. *PLOS ONE* 14(2): e0211388.
36. Vleminckx J., H. Schimann, J. Orivel, **M. Roy**, M. Fichaux, V. Vedel, T. Decaëns, M. Lapier, J. Engel, P. Petronelli, G. Jaouen, C. Baraloto. 2019. Coordinated beta-diversity across five taxonomic groups in Amazonian rainforests. *Scientific reports*. 9(1), 1-10
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38. Vanegas León M.-L., M. A. Sulzbacher, A. C. Rinaldi, **M. Roy**, M.-A. Selosse, M.-A. Neves. 2019. Are Trechisporales ectomycorrhizal or root endophytic? *Mycological Progress*. 18(9), 1231-1240
39. Jaouen, G., Sagne, A., Buyck, B., Decock, C., Louisanna, E., Manzi, S., Baraloto, C., **Roy, M.** and Schimann, H., 2019. Fungi of French Guiana gathered in a taxonomic, environmental and molecular dataset. *Scientific data*, 6(1), pp.1-6.
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41. Burri, S., Calastrenc, C., Poirier, N., Danu, M., Ioan, A., De Vleeschouwer, F., ... & **Roy, M.** (2020). Knowledge and conservation of old-growth forests: a key issue to face global changes. The case study of Strambu-Baiut-Maramures (eastern carpathians, Romania). *Quaderni storici*, 55(2), 369-404.
42. Py, V., Bal, M. C., Brin, A., Brun, C., Burri, S., Buscaino, S., ... **Roy, M.** & Tămaș, C. G. (2020). Knowledge and conservation of Old-Growth Forests: a key issue to face global changes. The case study of Strâmbu-Băiuț-Maramureș (Eastern Carpathians, Romania). *Quaderni Storici*, (164).
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44. Nagati, M., **Roy, M.**, DesRochers, A., Bergeron, Y., & Gardes, M. (2020). Importance of Soil, Stand, and Mycorrhizal Fungi in Abies balsamea Establishment in the Boreal Forest. *Forests*, 11(8), 815.
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46. Mennicken, S., Kondratow, F., Buralli, F., Manzi, S., Andrieu, E., Roy, M., & Brin, A. (2020). Effects of past and present-day landscape structure on forest soil microorganisms. *Frontiers in Ecology and Evolution*, 8, 13p.

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Society journals

1. Consiglio G, Contu M, **Roy M**, Selosse MA, Vizzini A. 2007. *Rhodocybe praesidentialis* spec. nov. Una nuova specie della sezione *Rhodocybe*. Addendum. *Rivista di Micologia dell'associazione micologica bresadola* 50: 175–178.
2. **Roy, M.** et M. -A. Selosse. 2010. De la graine à l'adulte, de l'individu à l'espèce: des orchidées plus hétérotrophes qu'il n'y paraît? *Cahier de la Société Française d'Orchidophilie* 8: 185-94.
3. Selosse M.-A. et **M. Roy**. 2012. Les plantes qui mangent des champignons. *Dossier Pour la science* 77.
4. **Roy, M** & Selosse. M. -A. La germination des orchidées, quoi de neuf ? *Revue de la Société Nationale d'Horticulture de France* 622.
5. Kohout, P., T. Malinová, **M. Roy**, M. Vohník, et J. Jersáková. 2013. Mycorrhizal and endophytic fungal communities associated with roots of *Pseudorchis albida* (Orchidaceae). *Lankesteriana International Journal on Orchidology* 13 (1-2): 142.
6. **Roy M**, Tomas W, Gareilh R, Claessens O, Tostain O, Leotard G, Sambin A, Ravet E. 2014. Diversité phylogénétique des orchidées de Guyane Française. *Cahier de la Société Française d'Orchidophilie* 8 : 99-118.
7. **Roy, M.** 2018. La mycohétérotrophie et le jardinier – un conte presque réaliste. *Revue de la Société Nationale d'Horticulture de France* 650.
8. **Roy M.**, V. Troispoux, E. Louisanna et H. Schimann. 2018. Diversité, distribution et écologie des champignons du mont Itoupé. *Les cahiers scientifiques du parc Amazonien de Guyane*, dossier spécial Itoupé 4(1) 59-64.

Book Chapters

1. Hynson, N. A., T. P. Madsen, M. -A. Selosse, I. KU Adam, Y. Ogura-Tsujita, **M. Roy**, et Gerhard Gebauer. 2013. The physiological ecology of mycoheterotrophy. In *Mycoheterotrophy*, 297-342. Springer, New York, NY.
2. **Roy, M.** et Selosse, M. -A. 2015. les réseaux mycorhiziens in *Analyse des réseaux sociaux appliquée à l'éthologie et l'écologie*. in Sueur et al., Editions matériologiques, Paris.
3. Gazal, N., Brin, A., Manzi, S., Houël, E., Lapied, E., Decaëns, T., & **Roy, M.** (2020). Earthworms and fungi in historical ecology. *Methods in Historical Ecology: Insights from Amazonia*, 99.

Oral communications at congresses

1. F. Richard, M. Duchemin, **M. Roy**, M.-A. Selosse, 2009. Diversity of ectomycorrhizal fungi associated with *Quercus ilex*: temporal and spatial variability. Atelier de l'ESF sur l'écologie des communautés de champignons ectomycorhiziens, 6-8/12/09, Nancy, France (oral)

2. A. Franc, M. Duchemin, **M. Roy**, E. Legname, C. Plassard, 2009. ECM communities : traits or taxa assembly ? Atelier de l'ESF sur l'écologie des communautés de champignons ectomycorhiziens, 6-8/12/09, Nancy, France (oral)
3. **M. Roy**, J. Rochet, S. Manzi, P. Jargeat, H. Gryta, P. -A. Moreau and M. Gardes. Does host evolution shape alder-associated ectomycorrhizal fungi communities? 2011, Mycological Society of America, 3-8/08/2011, Fairbanks, Alaska, USA (oral).
4. **M. Roy**, J. Rochet, P. Jargeat, H. Gryta, S. Manzi, P.-A. Moreau, M. Gardes, 2012. Coévolution des aulnes et de leurs champignons mycorhiziens : une histoire de couples et de communautés. 07-08/09/2012, congrès MycoFrance, Nancy, France (oral)
5. **M. Roy**, J. Rochet, P. Jargeat, H. Gryta, S. Manzi, P.-A. Moreau, M. Gardes, 2012. Coevolution in *Alnus*-ectomycorrhizal fungi mutualism : from couples to communities. International Society of Symbiosis, 02-08/08/2012, Krakow, Poland (oral).
6. **M. Roy**, M. Nagati, J. Hackel, C. Collongeon, R. Gareilh, L. Graf, S. Manzi, H. Gryta, P. Jargeat, A. Herrera, A. Pozzi, P.-A. Moreau, M. Fernandez, M. Gardes, 2013. Biogéographie d'un mutualisme : les aulnes et leurs champignons ectomycorhiziens. Congrès du REID, 26/09/2013, Paris, France. (oral)
7. **M. Roy**, 2013. Diversity and discovery of Ascomycota and endophytes in French Guiana, Rencontres d'étude des Ascomycota, 01-08/06/2013, Somiedo, Espagne (oral).
8. M. Nagati, W. Thomas, R. Gareilh, O. Claessbesn G. Leotard, A. Sambin, O. Tostain, E. Ravet **M. Roy**, 2014. Diversité phylogénétique des orchidées de Guyane Française. Congrès de la Société Française d'Orchidophilie, 16/04/2014, Blois, France (oral présenté par M. Nagati).
9. **M. Roy**, H. Schimann, R. Braga-Neto, L. Fernandez, J. Hackel, S. Manzi, R. Angelica Elias Da Silva, J. Duque, D. Frame, C. Decock, M. A. Neves. Diversity, distribution and specificity of ectomycorrhizal fungi in the Amazonian lowlands. International Conference on Mycorrhiza, 3-8/08/2015, Flagstaff, Arizona, USA (oral).
10. **M. Roy**, H. Schimann, S. Manzi, A. Sagne, G. Gruhn, C. Lechat, J. Fournier, H. Voiry, S. Welti, C. Decock, P.-A. Moreau, T. Henkel, R. Courtecuisse. 2015. FLAG : Fungi of the Lesser Antillas and French Guiana. Congrès Bibliothèque du Vivant, 24/06/2015, Paris, France (oral)
11. **M. Roy**, H. Schimann, R. Braga-Neto, L. Fernandez, J. Hackel, S. Manzi, R. Angelica Elias Da Silva, J. Duque, D. Frame, C. Decock, M. A. Neves. 2016. Diversity and host-specificity of ectomycorrhizal fungi from inselbergs of French Guiana. VIIIe Congress of Brazilian Mycology. 3-6/10/2016, Florianopolis, Brazil (oral).
12. **M. Roy**, H. Schimann, R. Braga-Neto, L. Fernandez, J. Hackel, S. Manzi, R. Angelica Elias Da Silva, J. Duque, D. Frame, C. Decock, M. A. Neves. 2016. High diversity and high specificity of ectomycorrhizal fungi communities associated with trees from low canopy forests in French Guiana. Association for Tropical Biology and Conservation. 17-21/06/2016, Montpellier, France (oral).
13. **M. Roy**, H. Schimann, R. Braga-Neto, L. Fernandez, J. Hackel, S. Manzi, R. Angelica Elias Da Silva, J. Duque, D. Frame, C. Decock, M. A. Neves. 2016. Diversité et distribution des champignons ectomycorhiziens au Brésil et en Guyane. Journée Jean Chevaugéon, 23-27/01/2016, Aussois, France (oral).
14. Nagati M., S. Manzi, P.-A. Moreau, M. Gardes, **M. Roy**. 2016. Les champignons des aulnes corses sont-ils endémiques ? Journée Jean Chevaugéon, 23-27/01/2016, Aussois, France (oral).
15. **M. Roy** & S. Caillon. 2017. De la scientificité à la une gestion créative multidimensionnelle : échanges de savoirs autour des plantes rencontrées dans le vignoble gaillacois. Colloque d'Anthropologie, University of Lausanne, Switzerland. 13/12/2017 (oral, invited)

16. S. Mennicken, F. Kondratow, **M. Roy**, E. Andrieu, A. Brin. 2017. Influence de la quantité de forêt ancienne dans le paysage sur la diversité et la composition des communautés de champignons. Rencontres d'écologie du Paysage. 23-26/10/2017, Toulouse, France (oral)
17. Nagati M., **M. Roy**, S. Manzi, A. DesRochers, Y. Bergeron, M. Gardes. Effect of canopy cover and micro-organisms on the establishment of balsam fir in the boreal forest. North European Forest Mycologist Congress, Uppsala, 09/02/2018
18. **M. Roy**, A. Taudière, P. -A. Moreau, F. Richard, J. D. Hoeksema, M. Gardes. 2018. En quoi les changements d'échelles et de mesures peuvent-ils éclairer la spécialisation de l'association aulnes-champignons ectomycorhiziens ? Journées Francophones des mycorhizes, 27-29/06/18. Dunkerque, France (oral)
19. **M. Roy**, A. Taudière, P. -A. Moreau, F. Richard, J. D. Hoeksema, M. Gardes. To network or not ? Variations in host-ECM fungi interactions. 2018. Symposium on ecology of mycorrhiza, Leiden, Netherlands, 29/10/18 (oral, invited)
20. Nagati M., **M. Roy**, S. Manzi, A. DesRochers, Y. Bergeron, M. Gardes. Effets des micro-organismes sur l'établissement du sapin en forêt boréale. Colloque de la chaire en aménagement forestier durable, Lorrainville, Canada, 30/11/2018.
21. Nagati M., **M. Roy**, S. Manzi, A. DesRochers, Y. Bergeron, M. Gardes. Les mycorhizes sont-elles impliquées dans l'établissement du sapin en pessière à mousse ? Colloque du centre d'étude sur la forêt, Chicoutimi, Canada, 01-02/05/2019.

Invited conferences

1. **M. Roy**, Schimann H., Sagne A., Moreau P.-A., Welti S., Lechat C., Fournier J., Gruhn G., Manzi S., Luisana E., Pelozuelo A., Decock C., Henkel T., Courtecuisse R., Gardes M. 2014. Conférence invitée à la Mycothèque de l'Université Catholique de Louvain. 09/10/2014 (oral, invited).
2. **M. Roy** et al. 2015. Ecology and evolution of ectomycorrhizal fungi in the Amazonian lowlands, or how to search for networks in hyper-diverse primary forests. Invited conference at Institute of Applied Sciences, Toulouse, France, 19/09/2015 (oral, invited).
3. **M. Roy** et al. 2015. L'Amazonie, un bon coin à champignons ? Conférence invitée, FRAIB, Toulouse, France. 04/06/15 (oral, invited)
4. **M. Roy**. 2015. Phylogéographie d'un mutualisme : les aulnes et leurs champignons ectomycorhiziens. Invited conference at INRA, Pierroton, 5/03/2015 (oral).
5. **M. Roy**, et al. Des réseaux...partout ? Distribution et écologie des réseaux mycorhiziens. Invited conference at UQAT, Rouyn Noranda, Québec, Canada, 30/08/16 (oral).
6. **M. Roy**, et al. Diversity and distribution of alder and its symbionts: impact of recent migration and climate changes. Invited conference at University of Bialystok, Poland, 13/07/2016 (oral).
7. **M. Roy** et al. From biogeography to ecology of ectomycorrhizal symbioses in the Neotropics, invited conference at Université Lille 1, 14/06/2016 (oral).
8. **M. Roy**. 2017. Metabarcoding specimens, roots and soil to search for ectomycorrhizal fungi in the Neotropics. Invited conference at Viçosa University, Brazil, 22/02/17 (oral)
9. **M. Roy** & H. Schimann. 2018. Diversity and distribution of ectomycorrhizal symbioses in French Guiana and in the Neotropics from the field to the course. Conference at Naturalis institute, Leiden, Netherlands, 16/04/18 (oral, invited)

10. **M. Roy**. 2018. What interaction networks tell us about plant, and fungi ecology. Invited conference at Agronomy Faculty, Buenos Aires, Argentina, 21/12/18 (oral)
11. **M. Roy**. 2018. To network or not ? Distribution and ecology of ecological networks between plant and fungi in the neotropical forests. Invited conference at Ecology Department of Buenos Aires University, Argentina, 18/12/18 (oral)
12. **M. Roy**. 2019. Biogeography of ectomycorrhizal symbioses in the neotropics. Invited conference at Cordoba University, Argentina, 08/02/19 (oral)
13. **M. Roy**. 2019. Are mycorrhizal networks the rule ? digging into ectomycorrhizal fungi ecology in the neotropics. Invited conference Mendoza University, Argentina, 04/02/19 (oral)
14. **M. Roy**, 2019. To network or not ? Distribution and ecology of ecological networks between plant and fungi from the boreal to the neotropical forests. Invited conference at IRBV, Montréal, Canada, 19/06/19 (oral)

Posters

1. **M. Roy**, 2013. What can we learn from albino individuals in orchids? Symposium du New Phytologist, 14-16/05/2013, University of Calabria, Italy (poster).
2. **M. Roy**, J. Hackel, S. Manzi, E. Louisanna, A. Iribar-Pelozuelo, A. Buffard, D. Frame, M. Gardes T. Henkel, C. Decock, P.-A. Moreau, R. Courtecuisse, H. Schimann. 2014. Are Ectomycorrhizal fungi so rare in the Neotropics? Diversity of ectomycorrhizal symbioses in French Guiana. Symposium du New Phytologist, 19-21/05/2014, Zurich, Switzerland (poster).
3. J. Hackel, P.-A. Moreau, R. Courtecuisse, B. Buyck, T. Henkel, S. L. Miller, E. de Crop, A. Verbeken, M.A. Neves, M. C. W. Jaeger, J. Duque, F. Wartchow, M. Sà, J.-L. Cheype, E. Louisanna, H. Schimann, S. Garnica, G. M. Mueller, V. Hofstetter, S. Manzi M. Gardes, **M. Roy**. 2014. Origins and diversification of neotropical taxa in a cosmopolitan lineage of ectomycorrhizal fungi (Basidiomycota: Russulaceae). International Mycology Conference, 3-8/08/2014, Bangkok, Thailand (poster présenté par J. Hackel).
4. Nagati M. M. Roy, S. Manzi, Y. Bergeron, M. Gardes. Communautés fongiques en forêt boréale : ce que le metabarcoding nous révèle. Colloque de Centre d'Etude sur la Forêt, Montréal, 01-02/05/2017.

Conference for societies

1. **M. Roy**, 2012. Les orchidées des racines truffées de champignons en tout genre. 15^e Congrès « Alliances au pays des racines 2012 » de la Société Nationale d'Horticulture de France, 25/05/2012, Paris, France (oral)
2. **M. Roy** and H. Schimann, 2014. Café des sciences dédié aux champignons de Guyane. Organisé à Kourou par l'association Canopée des Sciences.
3. **M. Roy**, 2015. Les orchidées mangeuses de champignons. Muséum d'histoire naturelle de Gaillac.
4. **M. Roy**, 2016. Des champignons voyageurs. Muséum d'histoire naturelle de Gaillac.
5. **M. Roy**. 2017. Les fromages sous la coupe des mycologues. Conférence-dégustation organisée par l' Association Mycologique Toulousaine.
6. **M. Roy**. 2018. Mixotrophy, or how to mix? Annual meeting of the mycological society of the Netherlands, Utrecht, Netherlands, 14/04/18 (oral, invited)